

THE ROMANTIC PERIOD IN MEDICINE

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THE ROMANTIC PERIOD is generally treated like a pariah among the medical-historical episodes. By many it is considered to be an historical indiscretion which is better forgotten and forgiven, than brought up again and studied anew.

Garrison speaks of it as the period during which German medicine "drifted into a maze of incomprehensible jargon and fanciful distinctions as to the real and the ideal, identity, imponderables, polarities, irritability, metamorphosis, and the like." Castiglioni, who is generally the more urbane and cosmopolitan critic, epitomizes this period as one in which medicine "hurled itself into the adventure of transcendental hypotheses." But he argues that "In history, the study of errors is no less instructive than the study of successes."

I must admit that the study of "errors" entices me. Part of that enticement derives from a psychological and purely personal bias, i.e., a sympathy, or shall I say an empathy for the underdog. The rest of the enticement derives from the persuasion that many errors aren't errors at all, but are rather untimely truths, or if you will, truths for which men and the age are not at the given time quite ripe.

It were well to define the *Romantic Period* chronologically, geographically, and otherwise. But in doing so, we should recognize that the making of definitions is always arbitrary and generally somewhat misleading. Thus the philosophical derivations of the Romantic School are traced from Immanuel Kant through Fichte, Schelling, and Hegel, Schelling being the one who exercised the most immediate and the greater influence on medical thought.

Geographically, the nidus of Romantic Medicine is Germany, but its effects extended far beyond, and reached even to the distant shores of the United States. The essential characteristics of Romantic Medicine, unless given in negative and derogatory terms such as those used by Garrison and other critics, who find the period and the school most

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antipathetic, can best be described in terms of their historical derivation and setting, for Romantic Medicine is best visualized as a movement, reactive to the antecedent developments in science and medicine.

Pat descriptions of the quintessence of Romantic Medicine in terms of "polarity," or "antithesis" are neither illuminating nor encompassing. It is true, as Ernest Hirschfeld has written: "*Die eigentliche Lebenslehre der Romantik aber war: Polarität.*" But as he promptly adds: "*Sie klingt uns überall entgegen, nicht nur in der Naturphilosophie.*"*

Polarity is a very ancient idea, encountered in the works of Heraclitus and Hippocrates. It is mirrored also in the apposites of the four humors. All of life, and all of experience attests to the external, rhythmic, cyclical return of the antithetical to that which Nietzsche termed "*Ewige Wiederkehr*", and which Freud has labelled the "repetition compulsion."

I am persuaded that the essential nature of the *Romantic Period*, and particularly of Romantic Medicine can be better grasped when viewed in the historical framework of its *advent*. Here Schelling's own words are most illuminating: "*Mit der Naturphilosophie beginnt, nach der blinden und ideenlosen Art der Naturforschung, die seit dem Verderb der Philosophie durch Bacon der Physik durch Boyle und Newton allgemein sich festgesetzt hat, eine höhere Erkenntnis der Natur: es bildet sich ein neues Organ der Anschauung und des Begreifens der Natur.*"**

According to Schelling, the Nestor of Nature Philosophy, what is wanted, is a reconstitution of *Naturforschung*, and a correction of those corrupting ideas and methods introduced by Bacon, Boyle, and Newton.

But what precisely are the corrupting ideas and methods which Schelling charges to Bacon, Boyle, and Newton? They are those of empiricism, wherein it is presumed that understanding derives from experience. Schelling, building on the philosophical ideas of his predecessors, Kant and Fichte, contends that it is the intellect which imparts meaning to experience—and not the reverse. This conviction is epitomized in Goethe's paradoxical and untranslatable dictum: "*Das Höchste*

* Hirschfeld, E. *Romantische Medizin. Zu einer künftigen Geschichte der naturphilosophischen Aera*. Leipzig, G. Thieme, 1930. ("The fundamental life doctrine of romanticism, however, was: polarity." "We encounter it everywhere, not only in Nature Philosophy.")

**Schelling's Werke II, cited by Hirschfeld, E., *op. cit.*, p. 70. ("With Nature Philosophy, which followed upon the blind and sterile ways of *Naturforschung* (exploration of nature) that had taken roots everywhere since the ruination of philosophy by Bacon, of physics by Boyle and Newton, there was inaugurated a deeper understanding of nature: there was created a new organ for the contemplation and understanding of nature.")

wäre: zu begreifen, dass alles Faktische schon Theorie ist." But Schelling dates his indictment rather late in the calendar of events. The corruption which he signalizes began some generations before, with the invention of printing in 1448, with the discovery of America in 1492, with the Reformation, 1517-1521, with the Paracelsian Chemotherapy of 1526, with the Copernican revolution in 1543, with the publication of the *Fabrica* by Vesalius on June 1 of the same year (1543), in a word with the constellation of events and developments which we name the Renaissance. (Bacon published his *Novum Organum* in 1620.)

The Renaissance is a period of somewhat mobile dating, but no matter how or when its termini are dated, this is one of its most distinctive achievements: when it was initiated, the universe was effectively compact and conceptually closed; at its expiration, and largely because of its disruptive and enlightening effects, the universe was no longer compact, nor was it any longer a "closed" universe.

The universe of St. Augustine and of Thomas Aquinas embraced the *alpha* and *omega* of all experiences and bound them together into a harmonious whole in the bonds of faith.* But the Age of Enlightenment, building upon the initiative of the Renaissance, discredited the simple faith of the believer, and proffered him a new faith, that of Science. "The philosophers of this time had left off contemplating the heaven of mediaeval piety, and were disposed to deify nature. They adored the rigidity of geometrical methods; they loved the study of the new physical science, which had begun with Galileo. Man they conceived of as a mechanism. Human emotions, even the loftiest, they delighted in explaining by very simple and fundamental natural passions. There is often something merciless and cynical about their analysis of many things sacred in human life. They are cold, formal, systematic, at least as to the outward shape of their doctrines."**

Descartes, profoundly representative of this age, began by doubting everything but his own existence, and sought to extricate himself from this murk of universal doubt and ignorance by the objective study of

* "This universe, made by God in six days, will not last forever. Just as it was created in time and as Adam and Eve were placed in the Garden of Eden, so it will proceed through all human history, in which the central events for the Christians were the Crucifixion and the Resurrection to the Last Judgment. Then all that was on the earth will be consumed by fire; the souls of the damned will be bound eternally in hell under the earth, and the souls of all the saved will be gathered in paradise; the spheres will stop revolving and the chief heavenly bodies will shine seven times more brightly. The whole marvellous mechanism of the universe will stand motionless forever as a monument to its creator. It was all a view of a universe that was closed, and it was all as clear and simple as the vast painted clocks run by machinery of which the men of the Renaissance were so fond. It was this universe that Copernicus upset in 1543." (Artz, F. B. *The mind of the Middle Ages*. New York, A. A. Knopf, 1953, p. 235.)

**Royce, J. *The spirit of modern philosophy*. Boston, Houghton. Mifflin Co., 1899, p. 28.

the data of experience. That was the inspiration and the technos of his *Méthode*.

It was this total and unsophisticated faith in the competence of objective experience to transilluminate and to reveal its own innate nature and meaning, that Schelling derogated and derided. The data of experience, he argued, do not of themselves fuse into meaningfulness. They do not indeed have an independent objective existence apart from the observer. But Schelling was not the first to propound this objection. Its most telling protagonist was the immortal Immanuel Kant of Königsberg (1724-1804). His *Critique of Pure Reason* appeared in 1781, and in the judgment of many learned men this work ranks with the highest creations of the human intellect.

It is impossible to summate Kant's *Critique* in brief, but this sentence drawn from the exposition of his philosophy by one who prized him, affords a glimpse into his major thesis: "The understanding creates the laws of phenomenal nature, creates them, indeed, not without the most close and constant reference to the facts of sense, creates them, in truth, merely by actively uniting together these facts of sense, but still creates the whole organization, the coherence, the unity, the sanity, of our world of business, of society, and of science."*

I shall not undertake to expound the modifications, and the elaborations which Kantian thought underwent in the philosophies of Fichte, Schelling and Hegel. That would carry us too far in the realm of pure philosophy. I want rather to underscore the fact that *Naturphilosophie*, and also Romantic Medicine, are direct derivatives of the new humanism inspired by Kant's philosophy, a humanism that turned ever more from exclusive concern with the outer world, to the contemplation of the mind of man.

Before leaving this phase of my exposition I would make note that Kant also had his predecessors. Parallel to the intellectual movement of the Renaissance, with its particulate, analytical philosophers and scientists, there operated another movement whose protagonists included Paracelsus, van Helmont, Stahl, and Casper Friedrich Wolff: "Parallel with the philosophy of enlightenment, however, there developed another, entirely contrasted, conception of nature, precursors of which were Paracelsus and van Helmont, and which, possessing in Stahl, Swedenborg, and Caspar Friedrich Wolff its scientifically most im-

* Royce, J. *op. cit.*, p. 131.

portant representatives, appears throughout the eighteenth century under various forms, a view of life which sees in natural phenomena an expression for the operations of spiritual powers, whereas, according to its tenets, the mechanical explanation of nature admits of only a superficial observation of what takes place, without any insight into that inherent connexion in existence which the spiritual powers imply. This attempt to regard nature as a living entity, to look for connexions in phenomena where, when viewed superficially, none are apparent, has constituted this tendency's greatest service, besides which the freedom of mechanical principles in many cases, admitted of greater liberty in the interpretation of special phenomena, as Wolff's embryological and Sprengel's botanical investigations proved. The weakness of this spiritualistic view of nature has lain in the frequent desire to solve by mystical formulae, problems the solution of which would have required observation and deep thought."* This movement has been described as a phase of the oft recurring Neo Platonism.** In essence it seeks to propound the vision of Nature as a living whole, and to search for the interconnection of its manifold phenomena, finding in each, meaning and significance which transcends the limited and the patent, and tracing its derivation from sources remote to its immediacy.

But to revert to Kant: we need to recognize that he, no less, and I would say more significantly than Descartes, helped to initiate the modern science of psychology. Goethe had phrased the apt couplet, so descriptive of Renaissance science:

*"Mein Kind ich habe es klug gemacht
"Ich habe nie über das Denken gedacht"*

Kant, however, did precisely the opposite—*Er hat über das Denken gedacht*—and he thus gave new meaning to "subjectivism" in psychology, that is to the study of those mental phenomena which cannot be reduced to brain or body processes.*** Ultimately, however, Kant's critical study of the cognitive process led to much more than "subjectivism" in psychology, important though that was. It inspired and directed the modern study of epistemology. It made the "meaning of meaning" not only a legitimate but a fundamental inquiry, prerequisite to the stabilization of scientific data and functions.

*Nordenskjöld, E. *The history of biology. A survey*; translated from the Swedish by L. B. Eyre. New York, A. A. Knopf, 1928, p. 269.

**Moon, R. O. *The relation of medicine to philosophy*. London, Longmans, Green & Co., 1909.

***Boring, E. G. German psychology before 1850; Kant, Herbert and Lotze, in his *A history of experimental psychology*, 2 ed., New York, Appleton-Century-Crofts, 1950, chap. 13, pp. 246-272.

You will find this derivative of Kantian philosophy broadly treated in Ernst Cassirer's *An Essay on Man*, and in greater and more particular detail in his *Substance and Function*. But I perceive that in pursuing the origins of Romantic Medicine back to its philosophic roots, we have been carried far too far from the core of our concern—namely—what in effect happened in medicine during these years. To these considerations we will now turn our attention.

The ancient physician, we need recall, considered himself to be the servitor of Nature, and his art as ancillary to the healing powers of Nature. It was the healing power of Nature, *the vis medicatrix naturae*, that brought the sick man back to health. The services of the physician were not deemed negligible or irrelevant; you will recall how highly Nestor was esteemed in the Homeric Saga. But the prevailing belief was that where Nature would not prevail, neither the physician's arts nor his skills could avail. Indeed you will find Hippocrates counselling the physician not to undertake the treatment of the "incurable" disease. This counsel, incidentally, has been variously interpreted and more often than not to the discredit of Hippocrates and his followers. But I think such derogatory interpretations are unwarranted, and are made without regard to the over-all philosophical and humanistic position of the Hippocratic physician.*

Ancient Greek Medicine, we need recall, through the regency of Galen's teachings, held sway over the medicine of Europe and of the Islamic lands, for almost two thousand years. "It can be safely said that up to the end of the 18th century, Galen was the medical author who was most frequently consulted and the only one to be placed on a level with Hippocrates."** It will profit us then to look more closely at the Hippocratic-Galenic system. It too was like the universe of the medieval philosopher, a closed system. Galen is said to have anticipated all the questions and to have been ready with an answer to each.

Man was a component, an immensely important one, in the scheme of the universe, and his being was presided over by Nature with whose benign powers the wise physician aligned both his arts and his skills. In the realm and during the period of Christian sovereignty, God took

* Hippocrates had, so to say, his early critics as well. The Methodist Asclepiades of Bythnia characterized Hippocratic Medicine as a meditation of death. In effect, however, this criticism was little justified, for the Hippocratic physician was an active therapist, well informed in the uses of many drugs. Yet his scheme of treatment was primarily physiological in the sense of corrective regimen; and for therapy he depended chiefly on the proper diet, fresh air, purgations, barley water, wine, massage, emetics, and hydrotherapy. The Hippocratic physician was also an excellent surgeon.

**Castiglioni, A. *A history of medicine*. New York, A. A. Knopf, 1947.

over from Nature, and it was God's laws that guided the physician's practices. In the famous saying of Paré—it was God who did the healing while Paré merely served both God and the wounded man, by bandaging the latter. Though medicine was buttressed with much specific knowledge, anatomical, pharmaceutical, and therapeutic, it was, all in all, rather simple in its basic schemes. Etiology was reduced to elementary dyscrasias, and nosography was general and symptomatic rather than particular. The patient had a rheum, a flux, a catarrh, an obstipation, a sweat, a fever and so on. Therapy was dictated, in the main, by the presenting symptoms, by the etiological analysis (i.e., the nature) of the dyscrasia postulated, and also be it added, by the general constitution and appearance of the patient.

The basic fact then is that the physician oriented in the Galenic tradition had much to learn, but he could and did feel secure in his knowledge and in the conceptual scheme upon which his practice rested. It was a complete scheme, a closed system, and, it too was shaken and shattered by the advent of modern science.

Paracelsus (1493-1541), paradoxical as it may seem, was among the first to breach the strongholds of ancient medicine. He not only burned the works of Galen and Avicenna (that is according to tradition—Sudhoff denies it) but more significantly, he challenged the effectiveness of the Galenic simples, substituted for them quintessential tinctures and distillates, and introduced alchemical elements such as mercury, lead, sulphur, iron, arsenic, copper sulphate, and potassium sulphate into medicinal use. Far more effective in the tearing down of ancient, that is of Galenic medicine, was the anatomist Andreas Vesalius. Not only did *De Fabrica Humani Corporis* (1543) show up the faults and errors of Galenic anatomy, but it provided the essential basis, the foundation, for the objective study of medicine in all its manifold divisions. Harvey, in his epoch making work, not only initiated the modern study of physiology, but demonstrated more effectively than ever Bacon did in his sonorous expositions, the fruitfulness of the inductive method.

Paracelsus, Vesalius and Harvey were medical critics and initiators, but medicine itself was not immune to the effects of the philosophical innovations of Bacon and Descartes, nor was medicine unaffected by the new scientific discoveries of Copernicus and Galileo. Indeed, medicine took on the complexion of the prevailing age, and in medicine too, it came to be thought that all bodily processes took place in accordance

with the known laws of physics and chemistry. Two schools of thought issued therefrom—the iatro-chemical and the iatro-mechanical. The leader of the first was Sylvius (Franz de la Boe—1614-1672), professor of Leyden. The founder of the iatro-physical, or as it was also termed the iatro-mechanical school was Giovanni Alfonso Borelli (1608-1679). Both schools soon gained many adherents. Since chemistry was then still an undeveloped science, the iatro-chemical school of medicine soon became entangled in many finespun speculations. The iatro-physicists, on the other hand, achieved some clear insights into the fine mechanical and structural operations of the body. Yet neither school proved satisfactory in guiding and sustaining the physician in his efforts to comprehend health and disease, and in his endeavor to bring the ailing individual back to health.

Physicians of great stature and generous endowments, men like Sydenham (1624-1689) and Boerhaave, cast all schools and systems aside and reverted to the Hippocratic vision of man and the universe, and to the methodic-empirical practice of medicine. Sydenham has been termed the English Hippocrates. Boerhaave (1668-1738) instituted the modern system of clinical, that is bedside, teaching and because so many students from all parts of Europe came to study with him at the University of Leyden, he was titled "*communis Europae praeceptor*." But neither Sydenham nor Boerhaave could stem the tide of speculative theorizing, nor effect a return to the simple yet embrative methods of Hippocratic study and observation. The result was "chaos and a babble of tongues."

Garrison describes 18th Century medicine as "dull and sober sided." I find it rather exciting even though largely futile and misguided. No age as much at loose ends could prove anything but exciting. And at loose ends it was—for medicine had been torn from its ancient moorings, and had not yet come into the snug harbor of modern biological knowledge and thought.

It is not my intention to detail the confusion of 18th Century medicine, nor in the space available, attempt to "draw order out of chaos." However, we do need to appreciate that there *is* a rationale to the anarchy in medical thought that prevailed in that period. It is the rationale of the transition state. In it we witness the travail of a scanning process carried out in gigantic dimensions; a scanning process seeking to re-establish social, cultural, economic, and ideological equilibrium on a plane different from, and on a scale grander than, that which had

been disturbed and disrupted in the wake of the Renaissance and by the advent of modern science. In these respects, our own century has much in common with the 18th Century.

Medicine is both a science and a discipline. But its ultimate rationale lies in the pleading needs of the sick, in the mute supplications of the feverish child, in the anguish of the woman in labor, in the tortuous struggles of the strong man writhing in pain. These are time-and-occasion-bound instances, wherein the physician is exposed to crucial testing. We fail or we succeed, and the issue is of mortal consequence to the sick. Celsus, the great Roman medical historian, encyclopedist, and commentator, who though vastly learned was not a physician, spoke for all suffering humanity when he said: "*Non interesse quid morborum faciat, sed quo toleat.*" Translated freely and in the suffering impatience of the sick one, this means "a plague on all your theories and speculations as to the cause of this illness—hasten to rid me of it."

It is in these respects that the *Scientia Nuova*, particularly in the field of medicine, proved so grievously disappointing. Physician and patient alike lamented and bewailed the impotence of medicine. Two significant texts reflect the frustration of this period—Johann Georg Zimmermann's two volume work *Von der Erfahrung in der Arzneykunst*, and Cabanis' work with the title *Du Degré de Certitude de la Médecine*. Zimmermann's work, which carried as its motto, the quotation from Bacon—"non ex vulgi opinione, sed ex sano iudicio"—was a challenge to medicine to become scientific. "*Der beobachtende Arzt hört die Natur, der experimentelle fragt sie aus.*" The second, that by Cabanis, is apologetic in character. The "*certitude*" of medicine, Cabanis argued, could be only practical and "*il faut s'en contenter.*" The total effect of these exhortations and inquiries concerning the scientific validity of medicine, appears to have been akin to that resulting when the centipede was asked which foot he puts forth first—that is, utter confusion.

Desperate confusion, as I have already indicated, reigned chiefly in the realm of therapy. Etiology and nosography were also in a rather confused and bewildered state. The only branch of medical science which appeared to be quite well founded and assured was pathological anatomy. Morgagni initiated this discipline in the publication of his classical work *De Causis et Sedibus Morborum*. John Hunter in England, and Bichat in France advanced the study of pathological anatomy

and made of it, in effect, the foundation basis of the *science* of medicine, and the presumptive rationale of therapy. For having, as it was presumed, set out and defined the "*causis et sedibus morborum*", the cause and site of disease, it was further assumed, with seemingly irrefutable warrant, that the merit of a therapeutic process or agent could be assessed by observing, and by mathematically defining its effects on the morbid locus and process. This assumption gave rise to the *Statistique Médicale* of Louis and of Cavaret. All of this was very interesting and indeed inspiring, but it had little to offer the practicing physician and his patient.

The French medical historian, P. V. Renouard, published a series of *Philosophical Letters on Medicine in the 19th Century*. In the first of these letters he set forth the proposition that "the bitterest criticisms which have ever been made upon medical science, and upon those who cultivate it, have flown from the pens of physicians" (p. 599). And to prove his point he cites the opinions and judgments of a number of the outstanding 19th Century medical scientists. Thus Bichat described the *Materia Medica*, historically, and of the period, as "an incoherent assemblage of incoherent opinions . . . a shapeless conglomerate of inexact ideas, of observations often puerile, of illusory remedies, and of formulas as oddly conceived as fastidiously arranged." "It is said," Bichat wrote further, "that the practice of medicine is repulsive. I say more than this: it is, in respect to its principles, taken from most of our *Materia Medicas*, impracticable for a sensible man." Broussais, who as our historian (Renouard) observes, was nurtured in the physiological ideas of Bichat, and the philosophy of Condillac and Cabanis, had no kindlier words for his fellow practitioners, nor a higher regard for the science of medicine—save only, of course, for his own system. "Imagine," Broussais exhorts his readers, "in all parts of the civilized world, legions of physicians who do not even suspect the existence of gastric inflammation [that was Broussais' theory] nor the influence which this phlegmasia exercises upon the other organs; see them pouring floods of vomits, purgatives, heating remedies as wine and alcohol, liquors impregnated with bituminous substances and with phosphorus . . . contemplate the consequences of this medical torture, the agitation, trembling convulsions, and phrenitic delirium, the cries of pain, tortured expression of face, and the burning breath of all these unfortunate ones. . . ." and so on, in the same vein, winding up in the peroration:

"What I have given suffices to prove that the epigrams of philosophers and poets, upon the faults of physicians and the pernicious effects of their art, are but feeble sketches by the side of this picture, at once so animated and so frightful."*

To these were added many other voices, condemning, disparaging, criticizing each and every aspect of medical science and medical practice. The cynical spirit of this period is well summated in the aphorism of M. Bouillaud (*Essai sur la Philosophie Médicale*): "Medicine should, to a certain point, be assimilated to the science of those Augurs who could not look each other in the face without laughing."

In summing the state of medicine in the first half of the 19th Century, Renouard wrote: "This want of union . . . does not relate to detail only; no, it is mostly upon the very principles which form the foundation of medical science that they disagree. Each one of these medical legislators aspires to nothing less than to build his ideal monument upon the ruins of all others. They all commence by destroying what exists, leaving to others to build up again when and how they can" (p. 604).

This state of affairs yielded two resultants; a plethora of systems, and Therapeutic Nihilism. Of systems there was seemingly no end. Doctors termed themselves allopaths, homeopaths, isopaths, physiopaths, eclectics, botanics, and so on. Therapeutic Nihilism was, so to say, the negation of all schools and systems. Therapeutic Nihilism is invariably referred to the so-called New Viennese School. Its foremost proponents were Rokitansky, Skoda, and Dietl. Rokitansky was the author of the celebrated *Handbuch der Pathologischen Anatomie*, published in 1842-46. He held pathological anatomy to be the touchstone of therapy, but he embraced also patho-physiology, the latter conceptualized in terms of chemical factors. Skoda is primarily famed for his extensive and refined studies in physical diagnoses—notably auscultation—initiated by Laennec, the inventor of the stethoscope, circa 1818. His rigorous and methodical assessment of all medical theories and practices inevitably led him to look upon the prevailing therapies with abysmal skepticism. Skoda was reputed to have reduced the number of his medicamenta to *Aqua Laurocerasi* (Cherry Laurel Water).

The most effective proponent of Therapeutic Nihilism and one who at the same time once again celebrated Nature's healing powers, was

* Broussais, F. J. V. *Examen des doctrines médicales et des systèmes de nosologie*. Paris, Mequignon-Marvis, 1821, p. 601.

Dietl (1804-1878). In 1845 he published a series of essays in the *Zeitschrift der Gesellschaft der Aerzte zu Wien*, in which he at one and the same time derogated the therapies of the past and boldly sketched those of the future, founded, as he envisioned them, on a thoroughly rational basis. This rationality not only embraced, but was founded on, the *vis medicatrix naturae*. "*Nur die Natur kann heilen.*"

In an eloquent passage he inquires why it is that the astronomer is not required to change day into night, nor the physicist, winter cold into summer heat, nor the chemist, water into wine. Yet the physician is called on to cure lung disorders (*Lungensuchten*), hydropsies, gout, heart failure, and so on. Is it because the physician's knowledge or his science warrants such expectations? Not at all! That "only nature can heal," Dietl wrote, is the highest and the most fundamental principle in practical (clinical—i.e., *praktischen*) medicine, and one to which we will needs adhere, even when we will have discovered some new subordinate "*Heilprinzip.*" It was in this meaning context and not in the spirit of callous indifference that Dietl wrote (1851): "The physician must be judged according to the amount of his knowledge, and not according to the results of his cures; it is the investigator, but not the healer, that is to be appreciated in the physician." ("*In Wissen und nicht in Handeln liegt daher unsere Kraft!*"*) This must, for now, suffice as a background for our particular concern with Romantic Medicine. You appreciate, of course, that I regard the full stretch of this period, the 18th no less than the early part of the 19th Century as having been romantic in its expectations and its orientations. In my meaning, "romantic" is a rather inclusive term. Descartes and Bacon were to my mind romantics in the unrealistic expectations of their respective systems. But that's an issue apart.

Let us return to Romantic Medicine. As we had observed, with the advent of modern science, medicine was split into two divergent schools of thought, the iatro-mechanical, or iatro-physical, and the iatro-chemical. There were other so-called diversionist schools—the animist or vitalist school, for example. But these we will largely disregard, for the sake of clearer orientation. This I grant is arbitrary, and even more arbitrary are some of the generalizations which I will shortly present. But the arbitrariness lies in the elimination of peripheral items and not in the corruption or distortion of the basic or core data. Thus one such

* Petersen, W. F. *Hippocratic wisdom*. Springfield, Ill., C. C. Thomas, 1946, p. 200.

arbitrary but valid generalization is that iatro-physical medicine prospered in France, while iatro-chemical medicine found favor with the English. Yet there were partisans of both schools in all lands. The generalization then rests on preponderance rather than on universality. Germany also had adherents of both schools. But German medicine was effectively influenced by neither. It was influenced by the thoughts and teachings of Schelling and of his elaborators. Among Schelling's medical disciples and exponentialists, the more noteworthy were Lorenz Oken (1779-1851), Ignaz Döllinger (1770-1844), Philipp Franz von Walther (1782-1849), and Kiemeyer (1765-1844). To these disciples of Schelling, science is, according to Haeser, indebted for contributions of abiding worth, and for inspirations of the most significant order, which, to quote Haeser—"have even in their errors yielded much of value."*

Oken is the most romantic character in this group of disciples. The son of a peasant born in a small village near Offenbach, he aspired in his youth to become, first a soldier, and later a mathematician. In 1800, when 21 years of age, he was drawn to the study of medicine. Two years later, he espoused Schelling's nature philosophy in protest against the "uninspired sensualism" of the British and French philosophers. In romantic effusion he compounded, as he himself professed, the teachings of Democritus', Aristotle's, and Goethe's ideas on the Reality of the Absolute, Schelling's concept of the Idea, and Hegel's Logos, into mathematic-symbolic-graphic representations (*mathematisch-symbolisch-bildhafte Gestalten*). Oken was a phenomenal, an inspired, and a most fertile personality. He founded and edited a journal with the title *Isis*. In the last issue of this publication, he sketched the concept of evolution. As a biologist and a comparative anatomist, Oken sought to bind the world-entire into an organic whole, complete as is the figure zero—which he held to be the Infinite, the resultant of the embrace of positive and negative. Oken envisaged the existence of primal and undifferentiated cells from which he derived, in theory of course, all forms of living organisms. He is thus, with warrant, credited with having anticipated the cellular theory. Ignaz Döllinger, who was professor at Würzburg and at München, shared with Oken, a deep interest in the developmental history of man, but Döllinger is more noted for

* ("Diesen Schülern Schellings verdanken die Naturwissenschaften Arbeiten des bleibenden Werthes, Anregungen der bedeutendsten Art, die selbst durch ihre Irrthümer manchen Nutzen gebracht haben.") Haeser, H. *Lehrbuch der Geschichte der Medicin*. Jena, F. Mauke, 1853, p. 810.

his application of the microscope in the study of both anatomy and physiology.

The early protagonists of Schelling's *Naturphilosophie* were essentially academic. In clinical medicine, Schelling's ideas were propounded and advanced by a host of influential practitioners and resourceful clinicians. Among these are counted Roschlaub, Marcus, Troxler, Kilian, Kieser, Malfatti, and J. Ad. Schmidt. These were the authors of numerous texts and monographs dealing with medicine conceived in the framework of Schelling's *Naturphilosophie*. Their joint products form the essential Corpus of Romantic Medicine. We may, at this point, properly inquire, what was the inspiration of this Corpus? What did it teach? And more specifically, how did the adherents of Romantic Medicine practice medicine? Bluntly, it can be said, using a term of recent genesis, that the inspiration of the Corpus of Romantic Medicine was ecological in character. Whereas the Galilean-Baconian-Cartesian science dismembered the universe into its ever more fine and finer components, and sought to study them in "splendid isolation," hoping thereby and thereafter to achieve a comprehension of the whole in the fusion of the particular knowledge—Romantic Medicine, quite in the spirit of the modern Gestalt psychology, held that the part did not attain to its ultimate meaning save in relation to the whole, the whole being greater than the mere sum of its parts. In this belief, disease was viewed not as an experiential interloper in the realm of normal being, but rather as a phase of being, relative to health. Disease was deemed to be meaningful and it was up to the physician to fathom its meaning. All phases of the living process engaged the interest of Romantic Medicine, among them notably sleep and the dream. In the writings of Schelling and Novalis are to be found some very provocative observations on the functions of the dream. Novalis, for example, spoke of dreams as "excrements of the brain." Gotthilf Heinrich Schubert (1780-1860) composed a work on dreams which in many respects anticipates Freud's dream theories. Carl Gustave Carus, who is to be counted among the Romantics, wrote his now famous *Psyche*. This work begins with the pronouncement: "The key to the comprehension of the nature of conscious psychological experience lies in the region of the Unconscious." Carus was an intimate friend of Goethe. The Romantics were deeply interested in psychiatry and in psychotherapy. They strove to penetrate into, and to comprehend insanity. Justinus Kerner in Weins-

berg housed a number of emotionally sick persons in his own home in order that he might observe them more closely. "*Die romantische Art der Krankenpflege war beinahe Gottesdienst geworden,*" wrote Leibbrand.* But in other respects Romantic therapy, qua therapy, was not distinguished for its rationality or effectiveness. "*Der romantische Arzt in der Praxis, das ist das kärglichste Kapitel in der Geschichte der romantischen Medizin.*"** Therapy was directed by the Brownonian system of sthenia and asthenia. The principle of the contraries, as well as the homeopathic principle of similarities guided therapy discretely. Thus asthenia was treated with stimulants; sthenia with sedation. But frozen limbs were thawed with cold water! Mesmerism had its numerous practitioners among the Romantics. Yet it should not be overlooked that hygiene and regimen were important components of Romantic therapy. Diet, fresh air, massage, exercise, balneotherapy, were employed in the treatment of the sick. Withal the therapeutic scene is not inspiring. It is, however, more pleasing than that to be witnessed, say in France, where under Magendie's instruction physicians were feeding their helpless victims massive doses of alkaloid poisons, where Jean Baptiste Bouillaud (1796-1881) was exsanguinating them, and where Broussais poured upon them "buckets of leeches."***

Homeopathy did not command the respect of the critical because of Hahnemann's speculations on pharmacodynamics, but statistical evidence did show that pneumonia sufferers treated in Vienna's homeopathic hospital stood a better chance of recovering than those treated in the allopathic hospitals, in which blood-letting was a common practice.**** I would not, however, give you the impression that Romantic Medicine was everywhere and at all times illuminated with a transcending rationality. I am persuaded that in many respects it was inspired, but there is no doubt that in numerous instances it was wild in its speculations, and even silly in its analogies.

Thus one of its adherents compared the red blood cell to the earth with its opposite polarities and electric potentials. Another accounted for an epidemic of typhus in terms of a coction of the universe.

Some of the medical historians make a Roman holiday of these speculative indiscretions of Romantic Medicine. It affords them great

* Leibbrand, W. *Romantische Medicin*. Hamburg, H. Goverts, 1937, p. 82.

** Leibbrand, W., *op. cit.* p. 181.

*** Petersen, W. F. *op. cit.* p. 284. (In 1833, 41,500,000 leeches were imported into France.)

**** Petersen, W. F. *op. cit.*, p. 189.

sport to cite the wild spinnings of the Romanticists. To such historians I would cite that superb injunction to humility: "First cast out the beam out of thine own eye; and then shalt thou see clearly to cast out the mote out of thy brother's eye."

In the last analysis, these were innocuous speculations. Against them can be arrayed an infinite number of "experimental ventures" which were not at all innocuous in their effects. No generation of scientists, no age of probers-into-the-unknown is ever exempt from error. No generation of men is infallible in its speculations.

Romantic Medicine came to an end neither with a whimper nor with a bang. It just evanesced. In the second half of the 19th Century, medicine "turned modern." Virchow, Claude Bernard, Pasteur, Robert Koch, et al., are names which are well known, and there would be no point in dwelling upon their accomplishments. Only one issue remains to be treated, and that is: What is the warrant for any interest in Romantic Medicine? Are not those historians correct who dismiss this episode as a *Walpurgisnacht* nightmare?

Quite evidently, I do not share in this opinion. On the contrary, I feel that this is a period charged with infinite inspirations, and that its thinking and its speculations are more meaningful today than they were in their so-called heyday, a century ago. So many of their intuitive ideas, scoffed by the cock-certain science of the late 19th Century, have become realities in our day. Schelling's dictum: "*Die höchste Vervollkommnung der Naturwissenschaften wäre daher die vollkommene Vergeistigung aller Naturgesetze zu Gesetzen des Anschauens und Denkens. Die Phaenomene müssen völlig verschwinden, und nur die Gesetze (das Formelle) bleiben.—Die vollendete Theorie der Natur würde diejenige seyn, kraft welcher die ganze Natur sich in Intelligenz auflöste,*"* has been substantially realized in Einstein's theory of relativity, lately elaborated anew. The Romantics' speculations, as to polarity, and many other seemingly foolish ideations and analogies, are solid components of today's scientific theory and technique. But that which appeals to me most in Romantic Medicine is the ecologic idea, the recognition which the Romantics shared in common, of the linkage of man to the universe and of the universe to man. We are today beginning to

* Schelling, F. W. J. *System des transcendentalen Idealismus*. Tübingen, 1800. ("The highest perfection of the natural sciences, . . . would be a complete intellectualization of all natural laws, into the laws of observation and of thinking. The isolated phenomena must disappear completely, and only laws (the formal one) must remain.—The most perfect theory of nature would be the one which causes all nature to dissolve into intelligence.")

appreciate how very narrow and, in many respects, how shallow were and are, the specifists' ideas which the physicians in the last century and in the first quarter of this century, shared in common. This, I submit, warrants our sympathetic study and our respectful review of what the Romantics in medicine thought, believed and felt. I heartily subscribe to Haeser's judicious assessment of the significance of the Romantic School: "The contemporary world which finds its pre-occupation with the singular and the perceptible so compelling, is, therefore, disinclined and indeed, incompetent to comprehend or to appreciate all this and much more besides. A more tranquil and less prejudiced generation, inclined as well to observe as to contemplate will, perhaps, recognize that there is many a precious nugget of pure gold to be found in the best of the *Naturphilosophie* writings which may eventually prove rewarding in diverse and unexpected ways."*

* Haeser, H., *op. cit.*, p. 816. ("Mag deshalb die Gegenwart, welche in der Beschäftigung mit dem Einzelnen und unmittelbar sich Darbietendem ihre Aufgabe findet, dies Alles und noch Anderes anzuerkennen weder geneigt noch befähigt seyn,—ein ruhigeres und unbefangeneres Geschlecht, das eben so sehr zu beobachten, als zu denken gesonnen ist, wird vielleicht erkennen, dass die tüchtigsten Schriften der naturphilosophischen Literatur noch manches Korn gediegenen Goldes führen, dem reiche Zinsen zu tragen dereinst vielleicht beschieden ist.")